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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/753,900	01/07/2004	Susan Jamie Borofsky	1592.028US1	8154

7590

07/27/2006

NCR Corporation
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EXAMINER

PYO, MONICA M

ART UNIT	PAPER NUMBER
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2161

DATE MAILED: 07/27/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/753,900	Applicant(s) BOROFSKY ET AL.	
	Examiner Monica M. Pyo	Art Unit 2161	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 January 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07 January 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>01/2004</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1-21 are present for examination and these claims are rejected.

Information Disclosure Statement

2. The information disclosure statement (IDS) submitted on 1/7/2004 was filed and considered by the examiner.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-2, 4-10, 12-13 and 15-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent Application Publication No. 2004/0103017 by Reed et al. (hereafter Reed) in view of U.S. Patent No. 5,966,695 issued to Melchione et al. (hereafter Melchione).

Claim 1:

Regarding Claim 1, Reed disclose a method for custom query generation, comprising:
a segmentation tool, wherein the query is directed to one or more data sources that are not mapped in the segmentation tool (Reed: [0028], lns. 1-8);
receiving a key selection and a table selection for the query, wherein the key and table selections are associated with data elements (Reed: [0029], lns. 1-13);
modifying the query using the key and table selections and (Reed: [0030], lns. 4-11); and

generating a custom query based on the query and the modifications, wherein when the custom query is executed within the segmentation tool a customer segment for a marketing campaign is generated (Reed: [0031], Ins. 1-5; [0035], Ins. 1-11; [0043], Ins. 1-6).

Reed does not explicitly disclose:

a customer hierarchy;

receiving a query;

However, Melchione discloses:

a three-tier-hierarchy with households, customers, and accounts, which corresponds to a customer hierarchy (Melchione: col. 10, Ins. 66-67; col. 11, Ins. 1-16);

receiving a particular element from a user, which corresponds to receiving a query (Melchione: col. 11, Ins. 65-67; col. 12, Ins. 1-3).

It would have been obvious to a person with ordinary skill in the art at the time of invention to apply a hierarchy and a user query of Melchione into the customer segmentation method of Reed. Skilled artisan would have been motivated to incorporate the Melchione's hierarchy and a user query in the customer segmentation method of Reed to utilize a customer database with records hierarchy (Melchione: col. 1, Ins. 60-65).

Claims 2, 12 and 17:

Regarding Claim 2, Reed and Melchione disclose the method wherein receiving the query further includes importing a file that includes at least a portion of the query into a segmentation query-build interface (Reed: [0028], Ins. 1-8) and (Melchione: col. 10, Ins. 53-62).

Claims 12 and 17 are also rejected based upon the same reasoning as Claim 2.

Claims 4 and 19:

Regarding Claim 4, Reed and Melchione disclose the method wherein the receiving the query further includes receiving at least a portion of the query from a paste operation into a segmentation query-build interface (Reed: [0028], Ins. 1-8) and (Melchione: col. 20, Ins. 21-34).

Claim 19 is also rejected based upon the same reasoning as Claim 4.

Claims 5 and 13:

Regarding Claim 5, Reed and Melchione and Reed disclose the method further comprising associating a unique identifier with the custom query, wherein the unique identifier is used to save and recall the custom query for subsequent use (Melchione: col. 24, Ins. 42-57) and (Reed: [0040], Ins. 1-5).

Claim 13 is also rejected based upon the same reasoning as Claim 5.

Claim 6:

Regarding Claim 6, Reed and Melchione disclose the method further comprising receiving a command to execute the custom query from within the segmentation tool (Reed: [0028], Ins. 1-8; [0029], Ins. 5-13) and (Melchione: col. 13, Ins. 44-47).

Claim 7:

Regarding Claim 7, Reed and Melchione and Reed disclose the method further comprising mapping data elements associated with the custom query to the segmentation tool for subsequent uses (Melchione: col. 24, Ins. 42-57) and (Reed: [0040], Ins. 1-5).

Claim 8:

Regarding Claim 8, Reed discloses a custom query for segmentation system, comprising:
a segmentation tool to generate customer segmentations for marketing campaigns (Reed: [0028], Ins. 1-8; [0043], Ins. 1-6); and

a custom query interface integrated into the segmentation tool (Reed: [0027], Ins. 1-7; [0028], Ins. 1-8);

wherein the custom query interface generates custom queries to tables and data elements which are not mapped in the segmentation tool, and wherein from the segmentation tool and generate the customer segmentations defined by results of the custom queries (Reed: [0028], Ins. 1-8; [0041], Ins. 1-10).

Reed does not explicitly disclose:

the custom queries execute.

However, Melchione discloses:

a query execution to correspond with the custom queries execute (Melchione: col. 27, Ins. 60-65).

It would have been obvious to a person with ordinary skill in the art at the time of invention to apply a query execution of Melchione into the customer segmentation method of Reed. Skilled artisan would have been motivated to incorporate the Melchione's a query execution in the customer segmentation method of Reed to execute the customer query (Melchione: col. 1, Ins. 60-65).

Claim 9:

Regarding Claim 9, Reed and Melchione disclose the system wherein the segmentation tool includes a query selection interface having at least two options, a first option for selecting queries associated with mapped tables, and a second option for selecting the custom query interface for generating the custom queries (Reed: [0028], Ins. 1-8) and (Melchione: col. 10, Ins. 53-62; col. 13, Ins. 16-26; col. 15, Ins. 58-67).

Claim 10:

Regarding Claim 10, Reed and Melchione disclose the system wherein the custom queries are written in SQL syntax (Reed: [0029], lns. 1-13; [0030], lns. 1-3).

Claim 15:

Regarding Claim 15, Reed discloses a custom query data structure for segmentation implemented in a computer-readable medium, comprising:

a key to a data element associated with a data store table, wherein the data element and the table are associated with (Reed: [0029], lns. 1-13);

logic directed to data sources not mapped in a segmentation tool (Reed: [0028], lns. 1-8);
and

automatically generated query logic based on the key and the table (Reed: [0029], lns. 1-13; [0055], lns. 8-11);

wherein the key, and automatically generated query logic form a custom query, which when executed from the segmentation tool generates a customer segmentation for a marketing campaign (Reed: [0031], lns. 1-5; [0035], lns. 1-11; [0043], lns. 1-6; [0055], lns. 8-11).

Reed does not explicitly disclose:

a customer hierarchy;
user-supplied query logic.

However, Melchione discloses:

a tree-tier-hierarchy element from a user; which corresponds to a customer hierarchy (Melchione: col. 10, lns. 66-67; col. 11, lns. 1-16);

receiving a particular element from a user, which corresponds to a user-supplied query logic (Melchione: col. 11, lns. 65-67; col. 12, lns. 1-3).

It would have been obvious to a person with ordinary skill in the art at the time of invention to apply a hierarchy and a user query of Melchione into the customer segmentation method of Reed. Skilled artisan would have been motivated to incorporate the Melchione's hierarchy and a user query in the customer segmentation method of Reed to utilize a customer database with records hierarchy (Melchione: col. 1, lns. 60-65).

Claim 16:

Regarding Claim 16, Reed and Melchione disclose the data structure wherein the user-supplied query logic is supplied from within a custom query interface that is integrated into the segmentation tool (Reed: [0027], lns. 1-15; [0028], lns. 1-8).

Claim 18:

Regarding Claim 18, Reed and Melchione disclose the data structure wherein the user-supplied query logic is manually entered into the custom query interface (Reed: [0028], lns. 1-8) and (Melchione: col. 26, lns. 42-52).

Claim 20:

Regarding Claim 20, Reed and Melchione disclose the data structure wherein the syntax of the user-supplied query logic is validated by the custom query interface (Reed: [0028], lns. 1-8) and (Melchione: col. 11, lns. 66-67; col. 12, lns. 1-6).

Claim 21:

Regarding Claim 21, Reed and Melchione disclose the data structure wherein the automatically generated query logic is not modifiable (Melchione: col. 14, lns. 37-45).

5. Claims 3 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Reed in view of Melchione, and further in view of U.S. Patent Application Publication No. 2003/0220917 by Copperman et al. (hereafter Copperman).

Claims 3 and 11:

Regarding Claim 3, Reed and Melchione disclose the method wherein interacting with a segmentation query-build interface (Reed: [0028], Ins. 1-8).

Reed and Melchione do not explicitly disclose:

disclose the method wherein receiving the query further includes interactively receiving at least some portions of the query from a user

However, Copperman discloses the user interaction and the user's responses, which correspond to disclose the method wherein receiving the query further includes interactively receiving at least some portions of the query from a user (Copperman: [0034], Ins. 7-13).

It would have been obvious to a person with ordinary skill in the art at the time of invention to apply the user's response by interaction of Copperman into the hierarchy and the user query of Melchione and the customer segmentation method of Reed. Skilled artisan would have been motivated to incorporate the Copperman's teaching of user's response by interaction in the Melchione's hierarchy and a user query in the customer segmentation method of Reed to enhance the query method within the CRM system (Copperman: [0006], Ins. 1-7).

Claim 11 is also rejected based upon the same reasoning as Claim 3.

6. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Reed in view of Melchione, and further in view of U.S. Patent No. 6,480,836 issued to Colby et al. (hereafter Colby).

Claim 14:

Regarding Claim 14, Reed and Melchione disclose the system wherein the custom query interface includes an option that displays documentation and about the custom queries (Reed: [0028], Ins. 1-8) and (Melchione: col. 32, Ins. 15-23).

Reed and Melchione do not explicitly disclose other metadata.

However, Colby discloses a metadata to corresponds with other metadata (Colby: col. 5, Ins. 38-49).

It would have been obvious to a person with ordinary skill in the art at the time of invention to apply the metadata of Colby into the hierarchy and the user query of Melchionem and the customer segmentation method of Reed. Skilled artisan would have been motivated to incorporate the Colby's teaching of utilizing a metadata in the Melchione's hierarchy and a user query in the customer segmentation method of Reed to utilize the feature of saving the table view via metadata (Colby: col. 1, Ins. 24-30).

Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Monica M. Pyo whose telephone number is 571-272-8192. The examiner can normally be reached on Mon-Fri 6:30 - 3:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffrey Gaffin can be reached on 571-272-4146. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Monica M Pyo
Examiner
Art Unit 2161

6/23/06

ay

Leslie Wong
Primary Examiner